LESSON 1

Figuring Out the Nutrition and Physical Activity Rumor Mill

Student Learning Objectives:	National Health Education Standards:
• Summarize the benefits of healthy eating, being physically active, and keeping the body hydrated, and the potential consequences of not doing so.	• Core Concepts
• Describe the federal dietary guidelines for teenagers, and the recommended amount of physical activity needed to achieve health benefits.	• Core Concepts

Lesson Synopsis

Introduce this module on nutrition and physical activity by having students distinguish between rumors and facts. Review the dietary guidelines for healthy eating and physical activity using a video. Emphasize the importance of drinking water to stay hydrated. Brainstorm in small groups the benefits of eating healthy and getting plenty of physical activity. Summarize the lesson. Assign as homework a two-day food intake and physical activity log. Ask students to collect and bring food packages and restaurant nutrition content pamphlets into class.

Activity	Time	Materials Needed
Introduction	5 minutes	Teacher Manual Resources • Student Worksheet: "Rumors About Nutrition and Physical Activity" Supplied by the Teacher • Pens or pencils
Input	30 minutes	Health Education Resources • Video [DVD]: *MyPlate, My Health: The Newest Dietary Guidelines,* Human Relations Media (23 minutes) • Poster Set: "MyPlate: Steps to a Healthier You," Michigan Model for Health Clearinghouse Teacher Manual Resources • Teacher Key: "Rumors About Nutrition and Physical Activity" • Teacher Reference: "More Facts and Rumors" • Teacher Reference—Assessment: "Assessment Rubric: Rumors About Nutrition and Physical Activity" • Student Self-Assessment Rubric: "Rumors About Nutrition and Physical Activity" Supplied by the Teacher • AV equipment • Pens or pencils • Plastic 8-ounce glasses, one per student (Extension Activity) • Several gallons of water, enough for each student to have 16 ounces (Extension Activity)

Application	8 minutes	Teacher Manual Resources • Slide Master: “What’s in It for Me?” • Teacher Reference: “Why Is It Important to Eat Healthy?” • Teacher Reference: “Why Is Physical Activity Important?” Supplied by the Teacher • Slide • Projector • Chart paper • Marker • Writing paper • Pens or pencils
Closure	2 minutes	Teacher Manual Resources • Student Worksheet: “Two Days in My Life” • Student Worksheet: “Choices I Might Make” (Extension Activity) • Teacher Reference—Assessment: “Assessment Rubric: Two Days in My Life, Evaluate My Intake, and Evaluate My Activity” • Student Self-Assessment Rubric: “Two Days in My Life, Evaluate My Intake, and Evaluate My Activity” Supplied by the Teacher • Folders, one per student
TOTAL	**45 minutes**	

Preparation

Prior to the Lesson

- **Decide if you want to assess** student progress. A rubric is provided for your use at the end of this lesson, “Assessment Rubric: Rumors About Nutrition and Physical Activity.” A second rubric is provided for assessing the activity initiated in this lesson and completed in Lesson 3, “Assessment Rubric: Two Days in My Life, Evaluate My Intake, and Evaluate My Activity.” It is provided at the end of this lesson so that you can tell your students how they will be assessed.
- **Decide if you want students to assess** their own progress. **Duplicate** the rubric, “Rumors About Nutrition and Physical Activity,” for students if you plan to have them use it. A second rubric is provided for assessing the activity initiated in this lesson and completed in Lesson 3. **Duplicate** the rubric, “Two Days in My Life, Evaluate My Intake, and Evaluate My Activity,” if you plan to use it. It is provided at the end of this lesson so that you can tell your students how they will be assessed.
- **Personalize and duplicate** the parent and family letter introducing this module. It is provided in Appendix B or you can download the document from the flash drive that is included with this manual. See the implementation section for more information on how to use
  this letter.
- **Collect food packages** from a variety of foods, and **ask students to help** by bringing to class food packages from foods they eat. You will need an assortment for Lesson 7.
- **Collect nutrition content pamphlets** from a variety of fast food and chain restaurants. **Ask students to help.** Many fast food and chain restaurants also have nutrition information online. Download information and print it.
- **Decide** how you will manage the students’ folders. In some teaching situations, it is best to collect them at the end of each lesson. Other teachers want students to take responsibility for having their folders available for each class. **Inform** students of your plan.
- **Decide** if you will have students bring foods to class that are under 100 calories so that classmates can try them. This is an extension activity in Lesson 6 and reinforces use of food labels. Be sure to follow your district’s policies related to food shared in the classroom. (Extension Activity)

For Introduction	• **Duplicate** the student worksheet, "Rumors About Nutrition and Physical Activity," for each student. • **Review** the teacher key, "Rumors About Nutrition and Physical Activity."
For Input	• **Preview** the video. • **Display** the poster, "MyPlate: Steps to a Healthier You." Do not post the recommended amounts for males and females during this lesson. • **Review** the teacher key, "Rumors About Nutrition and Physical Activity." • **Review** the teacher reference, "More Facts and Rumors," for possible use. (Extension Activity)
For Application	• **Read** the teacher references, "Why Is It Important to Eat Healthy?" and "Why Is Physical Activity Important?" • **Prepare a chart** with the heading "Benefits of Healthy Eating and Physical Activity." • **Prepare a slide** of the slide master, "What's in It for Me?"
For Closure	• **Duplicate** the student worksheet, "Two Days in My Life," for each student.

LESSON PROCEDURE

Introduction: Identify what students have heard or learned about nutrition and physical activity. Introduce this module and lesson.

5 minutes

Instructional Steps	Script and Detailed Directions
Introduce this unit with a student worksheet, "Rumors About Nutrition and Physical Activity." 	*Today we are beginning a unit on how eating healthy foods, drinking nutritious beverages, and being physically active helps us look good, feel good, and stay healthy. There are lots of rumors circulating about nutrition and physical activity. A "rumor" is a statement or story people share with one another. However, the statement or story may not be based on facts known to be true. Let's see if we can sort out rumors from facts.* Distribute the student worksheet, "Rumors About Nutrition and Physical Activity." *Part 1 of this worksheet has a series of statements related to nutrition and physical activity. Indicate whether the statements are facts or rumors not based on facts. Base your answers on what you have heard or learned about nutrition. I don't expect you to have all the correct answers.* *Be sure to list any rumors you may have heard about nutrition and physical activity at the bottom of Part 1 of your worksheet. We'll see if we can discover if the rumors are based on facts.* Allow time for students to complete Part 1.
Introduce this lesson.	*Let's review some of the basics about nutrition and physical activity.*

Input: Review the MyPlate guidelines for healthy eating and physical activity. Emphasize the importance of drinking water to stay hydrated.

30 minutes

Instructional Steps	Script and Detailed Directions
Introduce the video, *MyPlate, My Health: The Newest Dietary Guidelines.*	*This video will help clarify some of the rumors you may have heard about nutrition and physical activity. Use Part 2 of your worksheet to take notes. Correct your answers in Part 1 if you learn new information.* Show the video.
Display the poster, "MyPlate: Steps to a Healthier You."	Display the poster. *This poster will help guide us as we continue to learn about MyPlate.*
Review the worksheet using the teacher key, "Rumors About Nutrition and Physical Activity." 	Review the correct answers on the student worksheet.  If time allows, have students discuss their answers in small groups prior to providing the correct answers.  Use the teacher assessment rubric or have students use the self-assessment rubric provided at the end of the lesson if you want to assess students' progress.   Continue the exploration of rumors and facts by asking students to signal with a thumbs up if they think the statement you read is a fact and a thumbs down if they think it is a rumor. Use the statements on the teacher reference, "More Facts and Rumors." 
Emphasize the importance of drinking enough water each day.	*The video recommended a beverage we should drink instead of sugary drinks. In fact, it's one of the six essential nutrients.* ***Who remembers what it is?*** Answer: water ***Turn to your neighbor and guess what percentage of your body is water.*** Answer: 60% *Water is needed to help your body work correctly. If you don't get enough water, you become dehydrated. This results in weakness, dizziness and fatigue. Severe dehydration is a life-threatening medical emergency. Drinking water is especially important when you are being physically active.*  Have students drink two glasses of water each day in class.

Application: Discuss in small groups the notes taken from the video and highlight the main points.

8 minutes

Instructional Steps	Script and Detailed Directions
Form small groups.	*Now that we know the facts about eating healthy and being physically active, let's think about why this should matter to us.* Have students form small groups with four or five students in each group. Assign the group roles: recorder and spokesperson.
Identify benefits of eating healthy and getting 60 or more minutes of physical activity daily, using the slide, "What's in It for Me?" and the teacher references, "Why Is It Important to Eat Healthy?" and "Why Is Physical Activity Important?" 	Display the slide, "What's in It for Me?" *Please identify benefits of eating healthy and benefits of being physically active. You will have two minutes to brainstorm as many ideas as possible. Recorders, write your group's ideas.* After two minutes, call on each group's spokesperson to name one benefit of healthy eating or physical activity. Record the benefits on the chart titled "Benefits of Healthy Eating and Physical Activity." Continue collecting one idea from each group until all ideas have been named. Add any major benefits that haven't been named using the teacher references, "Why Is It Important to Eat Healthy?" and "Why Is Physical Activity Important?"  Save this chart for use during Lesson 3.

Closure: Summarize the lesson. Assign a food intake and physical activity log for two days. Ask students to collect and bring in food packages and restaurant nutrition content pamphlets.

2 minutes

Instructional Steps	Script and Detailed Directions
Summarize the lesson.	*Most of us want to look good, feel good, and be healthy. Eating healthy foods and being physically active can help us do all three.*
Distribute folders.	*As we learn more about nutrition and physical activity, I will ask you to keep all of your worksheets and notes in a folder. The information in your folder will help you with some of your assignments later on in this unit.*
Assign homework including the student worksheet, "Two Days in My Life." 	*In preparation for our work, you have three assignments:* 1. *Please collect and bring in as many food packages as you can. We will use them in future lessons.* 2. *If you are near a restaurant, stop in and ask if they have a nutrition content pamphlet you can have. We'll use these, too. Many chain restaurants also have nutrition information online. Download information from your favorite restaurant, print it, and bring it to class.*

Assign additional homework as an Extension Activity using the student worksheet, "Choices I Might Make." 	3. *Keep a log of your eating and physical activity for two days. Record everything you eat and drink as well as all your physical activity on your worksheet. It is due (date of Lesson 3).*  Use the teacher assessment rubric or have students use the self-assessment rubric provided at the end of the lesson if you want to assess students' progress on the activity initiated in this lesson and completed in Lesson 3.   Students do not always have control over the food that is available to them. Their logs may reflect available foods rather than foods they might choose. Have students create a menu for one day of meals and snacks that they would choose if they could. They can evaluate their selected daily menu and their intake logs with their physical activity log in Lesson 3.  Ask students to bring foods to class that are under 100 calories so that classmates can try them. This is an extension activity in Lesson 6 and reinforces use of food labels. Be sure to follow your district's policies related to food shared in the classroom. Collect the students' folders or ask students to bring them to each class.
Preview the next lesson.	*In our next health lesson, you will learn more about what information can be found on the MyPlate website.*

Name _____

Rumors About Nutrition and Physical Activity

Part 1:

Review these statements. Some are facts, and others are rumors that are not based on facts. Check the appropriate column based on what you have heard or learned about healthy eating and physical activity.

	Rumor not based on fact	Fact
1. You need calories to breathe.		
2. Eating only makes you sleepy.		
3. You burn calories when you sleep.		
4. Being active for 30 minutes, three times a week is the recommended goal for teens.		
5. Eating only one type of food is a good choice if it is a healthy food.		
6. Calories from some foods are better than calories from other foods.		
7. Everyone needs to use the same food plan to know how much of each food group to eat.		
8. Some fats are better than others.		
9. Most young people our age need to drink three cups of milk each day or eat an equivalent amount of cheese and yogurt.		
10. Most people don't eat the recommended amount of fruit, vegetables, or whole grains.		
11. There are six food groups on the new MyPlate.		
12. People should reduce the solid fats, trans fats, and added sugar they eat.		

List other rumors you have heard and want to know if they are facts.

Part 2: Answer these questions as you watch the video. Check your answers in Part 1, too. Correct them if you learn new information.

What are three of the main messages of the dietary guidelines discussed in the video?

What might happen if a person has poor nutrition?

We should balance the calories we eat with our activity level. What happens if a person eats too many calories?

How many minutes of physical activity should a young person get every day?

What is a "power calorie"?

List the names of the five sections on the MyPlate.

Rumors
About Nutrition and Physical Activity

Part 1:

Review these statements. Some are facts, and others are rumors that are not based on facts. Check the appropriate column based on what you have heard or learned about healthy eating and physical activity.

	Rumor not based on fact	Fact
1. You need calories to breathe.		X
2. Eating only makes you sleepy.	X	
3. You burn calories when you sleep.		X
4. Being active for 30 minutes, three times a week is the recommended goal for teens.	X	
5. Eating only one type of food is a good choice if it is a healthy food.	X	
6. Calories from some foods are better than calories from other foods.		X
7. Everyone needs to use the same food plan to know how much of each food group to eat.	X	
8. Some fats are better than others.		X
9. Most young people our age need to drink three cups of milk each day or eat an equivalent amount of cheese and yogurt.		X
10. Most people don't eat the recommended amount of fruit, vegetables, or whole grains.		X
11. There are six food groups on the new MyPlate.	X	
12. People should reduce the solid fats, trans fats, and added sugar they eat.		X

List other rumors you have heard and want to know if they are facts.

Part 2: Answer these questions as you watch the video. Check your answers in Part 1, too. Correct them if you learn new information.

What are three of the main messages of the dietary guidelines discussed in the video?

1. *Maintain calorie balance overtime. Enjoy your food, but eat less.*
2. *Focus on eating nutrient-dense foods and beverages.*
3. *Cut down on solid fats and added sugars.*
4. *Increase the calories you expend through physical activity.*

What might happen if a person has poor nutrition?

Diabetes, heart disease, cancer, lack of energy, perform better physically and mentally, look better

NOTE: These are the answers provided by the video. There are other negative results of poor nutrition, such as high blood pressure, obesity, and eating disorders.

We should balance the calories we eat with our activity level. What happens if a person eats too many calories?

They are stored as fat.

How many minutes of physical activity should a young person get every day?

60 minutes

What is a "power calorie"?

Power calories have lots of nutrients. They are nutrient-dense.

List the names of the five sections on the MyPlate.

grains group, vegetables group, fruits group, dairy group, protein foods group

Teacher Reference

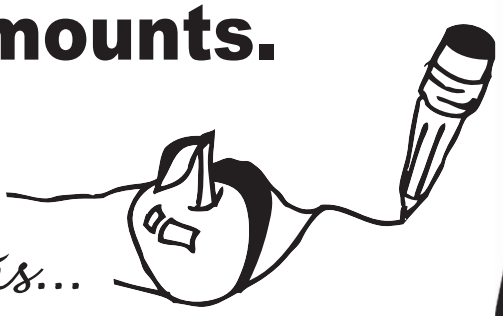
More Facts and Rumors

Statement	Rumor not based on fact	Fact
1. Physical activity must be done all at once each day. *A person can receive health benefits from 10-minute "doses" of physical activity. Teens should accumulate 60 minutes daily.*	X	
2. Time in organized teams and clubs is the only type of physical activity that counts. *There are many different activities that "count" as physical activity and result in health benefits.*	X	
3. Tomatoes are a fruit. *MyPlate states that tomatoes are a vegetable.*	X	
4. Many young people do not get enough physical activity for health benefits. *Only 63% of our nation's teens report being physically active for 60 minutes a day.*		X
5. Calories only make you fat. *Everyone needs to consume a certain level of calories to breathe, grow, repair cells, and move. When a person consumes more calories than he or she expends, overweight and obesity can result.*	X	
6. Ten minutes walking to school is beneficial for teens. *A person can receive health benefits from 10-minute "doses" of physical activity. Teens should accumulate 60 minutes daily.*		X
7. People should include strength training and bone strengthening activities weekly. *Choosing different types of physical activities is best for over-all health. Weight-bearing activities are critical for adolescents since this type of activity helps to build bones. A person's bone density is built prior to age 20.*		X
8. Strength training and bone strengthening activities can count towards a person's 60 minutes a day of physical activity. *There are many different activities that "count" as physical activity and result in health benefits.*		X
9. Physical activity must be at least at a moderate-intensity. *To achieve health benefits, moderate intensity activities are necessary.*		X
10. People should increase the amount of sodium they consume. *In general, people in the U.S. consume more sodium, or salt, than they need. The USDA recommends that people monitor their salt intake. Most people should reduce the amount of salt they consume.*	X	

WHAT'S IN IT FOR ME?

List how you benefit if you eat healthy foods in the recommended amounts.

- *I benefit by…*
- *another way is…*



List how you benefit if you are physically active every day for at least 60 minutes.

- *I benefit by…*
- *another way is…*

Why Is It Important to Eat Healthy?

Why is it important to eat grains, especially whole grains?

Eating grains, especially whole grains, provides health benefits. People who eat whole grains as part of a healthy diet have a reduced risk of some chronic diseases. Grains provide many nutrients that are vital for the health and maintenance of our bodies.

Health benefits:

- Consuming whole grains as part of a healthy diet may reduce the risk of heart disease.
- Consuming foods rich in fiber, such as whole grains, as part of a healthy diet, may reduce constipation.
- Eating whole grains may help with weight management.
- Eating grain products fortified with folate before and during pregnancy helps prevent neural tube defects during fetal development.

Nutrients:

- Grains are important sources of many nutrients, including dietary fiber, several B vitamins (thiamin, riboflavin, niacin, and folate), and minerals (iron, magnesium, and selenium).
- Dietary fiber from whole grains, or other foods, may help reduce blood cholesterol levels and may lower risk of heart disease, obesity, and type 2 diabetes. Fiber is important for proper bowel function. It helps reduce constipation and diverticulosis. Fiber-containing foods such as whole grains help provide a feeling of fullness with fewer calories.
- B vitamins (thiamin, riboflavin, and niacin) play a key role in metabolism – they help the body release energy from protein, fat, and carbohydrates. B vitamins are also essential for a healthy nervous system. Many refined grains are enriched with these B vitamins.
- Folate (folic acid), another B vitamin, helps the body form red blood cells. It is important for everyone to consume adequate amounts of folate. Women of childbearing age who may become pregnant should consume adequate folate, including folic acid from fortified foods or supplements. This reduces the risk of neural tube defects, spina bifida, and anencephaly during fetal development.
- Iron is used to carry oxygen in the blood. Many teenage girls and women in their childbearing years have iron-deficiency anemia. They should eat foods high in heme-iron (meats) or eat other iron containing foods along with foods rich in vitamin C, which can improve absorption of non-heme iron. Whole and enriched refined grain products are major sources of non-heme iron in American diets.
- Whole grains are sources of magnesium and selenium. Magnesium is a mineral used in building bones and releasing energy from muscles. Selenium protects cells from oxidation. It is also important for a healthy immune system.

Why is it important to eat vegetables?

Eating vegetables provides health benefits — people who eat more fruits and vegetables as part of an overall healthy diet are likely to have a reduced risk of some chronic diseases. Vegetables provide nutrients vital for health and maintenance of your body.

Health benefits:

- Eating a diet rich in fruits and vegetables as part of an overall healthy diet may reduce risk for heart disease, including heart attack and stroke.
- Eating a diet rich in some fruits and vegetables as part of an overall healthy diet may protect against certain types of cancers.
- Diets rich in foods containing fiber, such as some fruits and vegetables, may reduce the risk of coronary heart disease, obesity, and type 2 diabetes.
- Eating fruits and vegetables rich in potassium as part of an overall healthy diet may lower blood pressure, and may also reduce the risk of developing kidney stones and help to decrease bone loss.
- Eating foods such as vegetables that are low in calories per cup instead of some other higher-calorie food may be useful in helping to lower calorie intake.

Nutrients:

- Most vegetables are naturally low in fat and calories. None have cholesterol. (Sauces or seasonings may add fat, calories, or cholesterol.)
- Vegetables are important sources of many nutrients, including potassium, dietary fiber, folate (folic acid), vitamin A, and vitamin C.
- Diets rich in potassium may help to maintain healthy blood pressure. Vegetable sources of potassium include sweet potatoes, white potatoes, white beans, tomato products (paste, sauce, and juice), beet greens, soybeans, lima beans, spinach, lentils, and kidney beans.
- Dietary fiber from vegetables, as part of an overall healthy diet, helps reduce blood cholesterol levels and may lower risk of heart disease. Fiber is important for proper bowel function. It helps reduce constipation and diverticulosis. Fiber-containing foods such as vegetables help provide a feeling of fullness with fewer calories.
  - Diverticulosis is a condition that exists most frequently in older people. It occurs when pressure within the colon causes bulging pockets of tissue (sacs) that push out from the colonic walls. More than one bulging sac is referred to as diverticula. The condition of having these diverticula in the colon is called diverticulosis. There may or may not be physical symptoms.
- Folate (folic acid), another B vitamin, helps the body form red blood cells. It is important for everyone to consume adequate amounts of folate. Women of childbearing age who may become pregnant should consume adequate folate, including folic acid from fortified foods or supplements. This reduces the risk of neural tube defects, spina bifida, and anencephaly during fetal development.
- Vitamin A keeps eyes and skin healthy and helps to protect against infections.
- Vitamin C helps heal cuts and wounds and keeps teeth and gums healthy. Vitamin C aids in iron absorption.

Why is it important to eat fruit?

Eating fruit provides health benefits — people who eat more fruits and vegetables as part of an overall healthy diet are likely to have a reduced risk of some chronic diseases. Fruits provide nutrients vital for health and maintenance of your body.

Health benefits:

- Eating a diet rich in fruits and vegetables as part of an overall healthy diet may reduce risk for heart disease, including heart attack and stroke.
- Eating a diet rich in some fruits and vegetables as part of an overall healthy diet may protect against certain types of cancers.
- Diets rich in foods containing fiber, such as some fruits and vegetables, may reduce the risk of coronary heart disease, obesity, and type 2 diabetes.
- Eating fruits and vegetables rich in potassium as part of an overall healthy diet may lower blood pressure, and may also reduce the risk of developing kidney stones and help to decrease bone loss.
- Eating foods such as fruits that are low in calories per cup instead of some other higher-calorie food may be useful in helping to lower calorie intake.

Nutrients:

- Most fruits are naturally low in fat, sodium, and calories. None have cholesterol.
- Fruits are important sources of many essential nutrients, including potassium, dietary fiber, vitamin C, and folate (folic acid).
- Diets rich in potassium may help to maintain healthy blood pressure. Fruit sources of potassium include bananas, prunes and prune juice, dried peaches and apricots, cantaloupe, honeydew melon, and orange juice.
- Dietary fiber from fruits, as part of an overall healthy diet, helps reduce blood cholesterol levels and may lower risk of heart disease. Fiber is important for proper bowel function. It helps reduce constipation and diverticulosis. Fiber-containing foods such as fruits help provide a feeling of fullness with fewer calories. Whole or cut-up fruits are sources of dietary fiber; fruit juices contain little or no fiber.
- Vitamin C is important for growth and repair of all body tissues. It helps heal cuts and wounds, and keeps teeth and gums healthy.
- Folate (folic acid), another B vitamin, helps the body form red blood cells. It is important for everyone to consume adequate amounts of folate. Women of childbearing age who may become pregnant should consume adequate folate, including folic acid from fortified foods or supplements. This reduces the risk of neural tube defects, spina bifida, and anencephaly during fetal development.

Why is it important to consume dairy products?

Consuming dairy products provides health benefits — especially improved bone health. Foods in the dairy group provide nutrients that are vital for health and maintenance of your body. These nutrients include calcium, potassium, vitamin D, and protein.

Health benefits:

- Intake of dairy products is linked to improved bone health, and may reduce the risk of osteoporosis.
- The intake of dairy products is especially important to bone health during childhood and adolescence. This is the only time bone mass can be built. Most bone mass has been acquired by the age of 20. Children ages 9-18 need about 1300 milligrams of calcium to promote healthy bone growth.
- Intake of dairy products is also associated with a reduced risk of cardiovascular disease and type 2 diabetes, and with lower blood pressure in adults.

Nutrients:

- Calcium is used for building bones and teeth and in maintaining bone mass. Dairy products are the primary source of calcium in American diets. Diets that provide 3 cups or the equivalent of dairy products per day can improve bone mass.
- Diets rich in potassium may help to maintain healthy blood pressure. Dairy products, especially yogurt, fluid milk, and soy milk, provide potassium.
- Vitamin D functions in the body to maintain proper levels of calcium (by assisting with absorption) and phosphorous, thereby helping to build and maintain bones. Milk and soy milk that are fortified with vitamin D are good sources of this nutrient. Other sources include vitamin D-fortified yogurt and vitamin D-fortified ready-to-eat breakfast cereals.
- Dairy products that are consumed in their low-fat or fat-free forms provide little or no fat.

It is important to make fat-free or low-fat choices from the dairy group. Choosing foods from the dairy group that are high in saturated fats and cholesterol can have health implications. Diets high in saturated fats raise “bad” cholesterol levels in the blood. The “bad” cholesterol is called LDL (low-density lipoprotein) cholesterol. High LDL cholesterol, in turn, increases the risk for coronary heart disease. Some cheeses, whole milk, and products made from them are high in saturated fat. To help keep blood cholesterol levels healthy, limit the amount of these foods you eat. In addition, a high intake of fats makes it difficult to avoid consuming more calories than are needed.

Why is it important to make lean or low-fat choices from the Protein Foods group?

Foods in the protein foods group provide nutrients that are vital for health and maintenance of your body. However, choosing foods from this group that are high in saturated fat and cholesterol may have negative health implications.

Nutrients:

- Meat, poultry, fish, dry beans and peas, eggs, nuts, and seeds supply many nutrients. These include protein, B vitamins (niacin, thiamin, riboflavin, and B_6), vitamin E, iron, zinc, and magnesium.
- Proteins function as building blocks for bones, muscles, cartilage, skin, and blood. They are also building blocks for enzymes, hormones, and vitamins. Proteins are one of three nutrients that provide calories (the others are fat and carbohydrates).
- B vitamins found in this food group serve a variety of functions in the body. They help the body release energy, play a vital role in the function of the nervous system, aid in the formation of red blood cells, and help build tissues.
- Iron is used to carry oxygen in the blood. Many teenage girls and women in their child-bearing years have iron-deficiency anemia. They should eat foods high in heme-iron or eat other non-heme iron containing foods along with foods rich in vitamin C, which can improve absorption of non-heme iron.

Sources of Heme-Iron (Iron From Animal Sources)	Sources of Non-Heme Iron (Iron From Non-Animal Sources)
Beef	Enriched breakfast cereals
Shrimp	Cooked beans and lentils
Sardines	Baked potato with skin
Turkey	Enriched pasta

- Magnesium is used in building bones and in releasing energy from muscles.
- Zinc is necessary for biochemical reactions and helps the immune system function properly.
- Seafood contains a range of nutrients, notably the omega-3 fatty acids, EPA and DHA. Eating about 8 ounces per week of a variety of seafood contributes to the prevention of heart disease. Smaller amounts of seafood are recommended for young children.

Health implications:

- Diets that are high in saturated fats raise “bad” cholesterol levels in the blood. The “bad” cholesterol is called LDL (low-density lipoprotein) cholesterol. High LDL cholesterol, in turn, increases the risk for coronary heart disease. Some food choices in this group are high in saturated fat. These include fatty cuts of beef, pork, and lamb; regular (75% to 85% lean) ground beef; regular sausages, hot dogs, and bacon; some luncheon meats such as regular bologna and salami; and some poultry such as duck. To help keep blood cholesterol levels healthy, limit the amount of these foods you eat.
- Diets that are high in cholesterol can raise LDL cholesterol levels in the blood. Cholesterol is only found in foods from animal sources. Some foods from this group are high in cholesterol. These include egg yolks (egg whites are cholesterol-free) and organ meats such as liver and giblets. To help keep blood cholesterol levels healthy, limit the amount of these foods you eat.
- A high intake of fats makes it difficult to avoid consuming more calories than are needed.

- Seafood varieties that are commonly consumed in the United States that are higher in EPA and DHA and lower in mercury include salmon, anchovies, herring, sardines, Pacific oysters, trout, and Atlantic and Pacific mackerel (*not* king mackerel, which is high in mercury). The health benefits from consuming seafood outweigh the health risk associated with mercury, a heavy metal found in seafood in varying levels.
- Eating peanuts and certain tree nuts (i.e., walnuts, almonds, and pistachios) may reduce the risk of heart disease when consumed as part of a diet that is nutritionally adequate and within calorie needs. Because nuts and seeds are high in calories, eat them in small portions and use them to replace other protein foods, like some meat or poultry, rather than adding them to what you already eat. In addition, choose unsalted nuts and seeds to help reduce sodium intakes.

Adapted from: http://www.ChooseMyPlate.gov

Why Is Physical Activity Important?

Being physically active is a key element in living a longer, healthier, happier life. Physical activity simply means movement of the body that uses energy. Walking, gardening, briskly pushing a baby stroller, climbing the stairs, playing soccer, or dancing the night away are all good examples of being active. For health benefits, physical activity should be moderate or vigorous intensity.

Moderate physical activities include:

- Walking briskly (about 3 1/2 miles per hour)
- Bicycling (less than 10 miles per hour)
- General gardening (raking, trimming shrubs)
- Dancing
- Golf (walking and carrying clubs)
- Water aerobics
- Canoeing
- Tennis (doubles)

Vigorous physical activities include:

- Running/jogging (5 miles per hour)
- Walking very fast (4 1/2 miles per hour)
- Bicycling (more than 10 miles per hour)
- Heavy yard work, such as chopping wood
- Swimming (freestyle laps)
- Aerobics
- Basketball (competitive)
- Tennis (singles)

You can choose moderate or vigorous intensity activities, or a mix of both each week. Activities can be considered vigorous, moderate, or light in intensity. This depends on the extent to which they make you breathe harder and your heart beat faster. Only moderate and vigorous intensity activities count toward meeting your physical activity needs. With vigorous activities, you get similar health benefits in half the time it takes you with moderate ones. You can replace some or all of you moderate activity with vigorous activity. Although you are moving, light intensity activities do not increase your heart rate, so you should not count these towards meeting the physical activity recommendations. These activities include walking at a casual pace, such as while grocery shopping, and doing light household chores.

Regular physical activity can produce long term health benefits. People of all ages, shapes, sizes, and abilities can benefit from being physically active. The more physical activity you do, the greater the health benefits.

Being physically active can help you:

- Increase your chances of living longer
- Feel better about yourself
- Decrease your chances of becoming depressed
- Sleep well at night
- Move around more easily
- Have stronger muscles and bones
- Stay at or get to a healthy weight
- Be with friends or meet new people
- Enjoy yourself and have fun

When you are *not* physically active, you are more likely to:

- Get heart disease
- Get type 2 diabetes
- Have high blood pressure
- Have high blood cholesterol
- Have a stroke

Physical activity and nutrition work together for better health. Being active increases the amount of calories burned. As people age their metabolism slows, so maintaining energy balance requires moving more and eating less.

Some types of physical activity are especially beneficial:

- *Aerobic activities* make you breathe harder and make your heart beat faster. Aerobic activities can be moderate or vigorous in their intensity. Vigorous activities take more effort than moderate ones. For **moderate activities**, you can talk while you do them, but you can't sing. For **vigorous activities**, you can only say a few words without stopping to catch your breath.
- *Muscle-strengthening activities* make your muscles stronger. These include activities like push-ups and lifting weights. It is important to work all the different parts of the body — your legs, hips, back, chest, stomach, shoulders, and arms.
- *Bone-strengthening activities* make your bones stronger. Bone-strengthening activities, like jumping, are especially important for children and adolescents. These activities produce a force on the bones that promotes bone growth and strength.
- *Balance and stretching activities* enhance physical stability and flexibility, which reduces risk of injuries. Examples are gentle stretching, dancing, yoga, martial arts, and t'ai chi.

Source: http://www.ChooseMyPlate.gov

NOTE: Look for additional information in the U.S. Department of Health and Human Services document, "2008 Physical Activity Guidelines for Americans." It can be located on the U.S. Department of Health and Human Services website: www.health.gov/paguidelines.

Name _____

Two Days in My Life

DIRECTIONS:

Part 1: For two 24-hour days, record everything you eat and drink, including meals and snacks. Don't forget the extras you might put on your food, such as mayonnaise or butter. Desserts and candy count, too. Record the time you eat or drink the foods or beverages and how much you eat or drink. Use the chart bellow to help you estimate the amounts. You may need to ask the person who prepared the food if you are unsure of the ingredients.

Part 2: For two 24-hour days, record everything you do that is physically active. You can include organized recreation, such as clubs and school sports, and activities you do on your own, such as walking or basketball in the driveway.

FOOD GROUP	MEASURING TOOLS
Fruit Group	• One baseball equals one cup. • One small computer mouse equals one-half cup.
Vegetable Group	• One deck of cards equals one-half cup. • One baseball equals one cup. • One small computer mouse equals one-half cup.
Dairy Group	• One eight-ounce glass equals one cup. • One baseball equals one cup. • Two nine-volt batteries equal 1 ½ ounces of cheese and counts as one cup.
Protein Foods Group	• One small computer mouse equals one-half cup of beans and counts as two ounces. • One deck of cards equals two to three ounces of meat. • One nine-volt battery equals one tablespoon of peanut butter and counts as one ounce.
Grain Group	• One CD in its plastic case equals one slice of bread and counts as one ounce. • One baseball equals one cup. • One small computer mouse equals one-half cup.

DAY ONE

WHAT AM I EATING AND DRINKING?			HOW PHYSICALLY ACTIVE AM I?	
Time of Day	Name of Food or Beverage	How much did I eat or drink?	Type of Physical Activity	How long was I active?
Morning				
Afternoon				
Evening				

DAY TWO

WHAT AM I EATING AND DRINKING?			HOW PHYSICALLY ACTIVE AM I?	
Time of Day	Name of Food or Beverage	How much did I eat or drink?	Type of Physical Activity	How long was I active?
Morning				
Afternoon				
Evening				

Name _____

Choices *I Might Make*

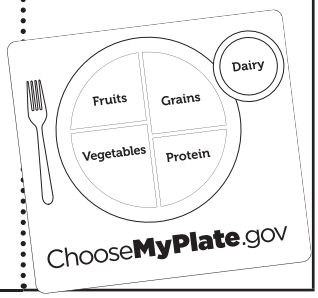
Directions: Create a menu for one day of meals and snacks if you could choose what groceries to buy and what to fix. Complete as much information about your meals and snacks as you can.

Breakfast

Foods	Amounts	Food Group	Calories

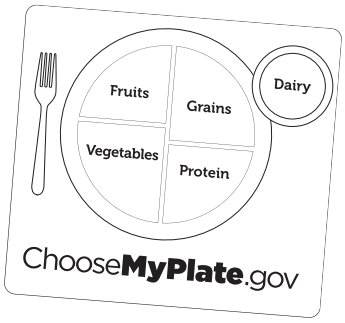
Mid-Morning Snacks

Foods	Amounts	Food Group	Calories



Lunch

Foods	Amounts	Food Group	Calories



Mid-Afternoon Snacks

Foods	Amounts	Food Group	Calories

Dinner

Foods	Amounts	Food Group	Calories

Evening Snacks

Foods	Amounts	Food Group	Calories

Assessment Rubric: Rumors About Nutrition and Physical Activity

Elements in the Lesson

- Part 1: Review the statements. Check the appropriate column based on what you have heard or learned about healthy eating and physical activity.
- Part 2: Answer the questions as you watch the video. Recheck your answers in Part 1.

The following **holistic** rubric can be used for assessing student ability to distinguish between rumors and facts and to answer questions based on a video. The student has demonstrated the elements listed above through a written assignment.

To access an **analytic** rubric for this assignment or a **generic, holistic** rubric that can be used for any assignment, check the resources for Lesson 1 on the flash drive that came with your manual.

Elements	Exceeds Expectations 4	Meets Expectations 3	Progressing Toward Expectations 2	Does Not Meet Expectations 1	Comments
Part 1: Statement Review	Each statement in Part 1 is checked as either fact or rumor.	Each statement in Part 1 is checked as either fact or rumor.	Most statements in Part 1 are checked as either fact or rumor.	Few statements in Part 1 are checked as either fact or rumor.	
Part 2: Video Questions	Each of the questions in Part 2 is answered accurately with detailed explanations.	Each of the questions in Part 2 is answered accurately.	Each of the questions in Part 2 is answered, but there may be slight inaccuracies.	Few of the questions in Part 2 are answered, and there are many inaccuracies.	
Review of Part 1 Answers	After watching the video, all errors in Part I were corrected.	After watching the video, all errors in Part I were corrected.	After watching the video, some errors in Part I were corrected.	After watching the video, few errors in Part I were corrected.	

Name _____

Rumors About Nutrition and Physical Activity

This rubric can be used for assessing your ability to distinguish between rumors and facts and to answer questions after viewing a video.

Review the rubric and circle the number with the statements that best represents your work for this assignment.

Elements	Exceeds Expectations 4	Meets Expectations 3	Progressing Toward Expectations 2	Does Not Meet Expectations 1	Comments
Part 1: Statement Review	I checked each statement in Part 1 as either fact or rumor.	I checked each statement in Part 1 as either fact or rumor.	I checked most statements in Part 1 as either fact or rumor.	I checked few statements in Part 1 as either fact or rumor.	
Part 2: Video Questions	I accurately answered each of the questions in Part 2 with detailed explanations.	I accurately answered each of the questions in Part 2.	I answered each of the questions in Part 2, but there may be slight inaccuracies.	I answered few of the questions in Part 2, and there are many inaccuracies.	
Review of Part 1 Answers	After watching the video, I found and corrected all errors in Part 1.	After watching the video, I found and corrected all errors in Part 1.	After watching the video, I found and corrected some errors in Part 1.	After watching the video, I found and corrected few errors in Part 1.	

Assessment Rubric:
Two Days in My Life, Evaluate My Intake, and Evaluate My Activity

Elements in the Lesson

- Keep a log of your eating and physical activity for two days. Record everything you eat and drink and all your physical activity on your worksheet.
- Total the amount of food eaten and beverages consumed for each of the five food groups.
- Circle the foods and beverages that are high in fat or added sugar.
- Add up the time spent in moderate or vigorous physical activities.
- Answer these questions for food and beverage intake:
  - What food group will I need to eat more of?
  - What are some examples of foods or beverages that I will enjoy adding?
  - What food group will I need to eat or drink less from?
  - What high-fat, high-sugar foods or beverages will I need to limit?
- Answer these questions for physical activity:
  - If I was not physically active for 60 minutes or more, what will I do to increase the time I am active?
  - If I was not moderately or vigorously physically active, what will I do to increase my activity level?
  - What are some activities I will enjoy doing?

The following **holistic** rubric can be used for assessing student ability to evaluate food and beverage intake and the amount of physical activity. The student has demonstrated the elements listed above through written assignments.

To access an **analytic** rubric for this assignment or a **generic, holistic** rubric that can be used for any assignment, check the resources for Lesson 1 on the flash drive that came with your manual.

Teacher Note: This activity is initiated in Lesson 1. However, this rubric will be used after the completion of the activity in Lesson 3. It is provided here so that you can tell your students how they will be assessed.

Elements	Exceeds Expectations 4	Meets Expectations 3	Progressing Toward Expectations 2	Does Not Meet Expectations 1	Comments
Food, Beverage, and Activity Log	Two-day food, beverage, and activity log is complete and contains: ___Amount of food and beverage from each food group totaled ___High fat and added sugar foods and beverages circled ___Time spent doing moderate or vigorous activity totaled	Two-day food, beverage, and activity log is complete and contains: ___Amount of food and beverage from each food group totaled ___High fat and added sugar foods and beverages circled ___Time spent doing moderate or vigorous activity totaled	Two-day food, beverage, and activity log is mostly complete and contains: ___Amount of food and beverage from each food group totaled ___High fat and added sugar foods and beverages circled ___Time spent doing moderate or vigorous activity totaled	Two-day food, beverage, and activity log is incomplete and may be missing one or more of: ___Amount of food and beverage from each food group totaled ___High fat and added sugar foods and beverages circled ___Time spent doing moderate or vigorous activity totaled	
Food, Beverage, and Activity Questions	Each of the questions related to food and beverage intake and physical activity are accurately answered and show a depth of understanding.	Each of the questions related to food and beverage intake and physical activity are accurately answered.	Some of the questions related to food and beverage intake and physical activity are answered, but there may be inaccuracies.	Few of the questions related to food and beverage intake and physical activity are answered, and there are inaccuracies.	

Two Days in My Life, Evaluate My Intake, and Evaluate My Activity

This rubric can be used for assessing your ability to evaluate food and beverage intake and the amount of physical activity.

Review the rubric and circle the number with the statements that best represents your work for this assignment.

Elements	Exceeds Expectations 4	Meets Expectations 3	Progressing Toward Expectations 2	Does Not Meet Expectations 1	Comments
Food, Beverage, and Activity Log	My two-day food, beverage, and activity log is complete and contains: ___Amount of food and beverage from each food group totaled ___High fat and added sugar foods and beverages circled ___Time spent doing moderate or vigorous activity totaled	My two-day food, beverage, and activity log is complete and contains: ___Amount of food and beverage from each food group totaled ___High fat and added sugar foods and beverages circled ___Time spent doing moderate or vigorous activity totaled	My two-day food, beverage, and activity log is mostly complete and contains: ___Amount of food and beverage from each food group totaled ___High fat and added sugar foods and beverages circled ___Time spent doing moderate or vigorous activity totaled	My two-day food, beverage, and activity log is incomplete and may be missing one or more of: ___Amount of food and beverage from each food group totaled ___High fat and added sugar foods and beverages circled ___Time spent doing moderate or vigorous activity totaled	
Food, Beverage, and Activity Questions	I answered all questions related to food and beverage intake and physical activity. All of my answers are accurate and show a depth of understanding.	I answered all questions related to food and beverage intake and physical activity. All of my answers are accurate.	I answered most questions related to food and beverage intake and physical activity are answered, but there may be inaccuracies.	I answered few of the questions related to food and beverage intake and physical activity, and there are inaccuracies.	